UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 7,193,187 B2 Page 1 of 2

APPLICATION NO.: 10/775473

DATED: March 20, 2007

INVENTOR(S): Ing-Shin Chen et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title page, Item (54), Inventors, add -- Richard Kramer, Sharon, MA (US) --.

Column 3, line 20: " α_p " should be -- α_ρ --.

Column 4, line 18: " α_p " should be -- α_p --.

Column 6, line 11: " α_p " should be -- α_ρ --.

Column 6, line 59: " α_p " should be -- α_p --.

Column 8, line 14: " $R = R_0 \cdot [1 + \alpha_p (T - T_0)]$ " should be

$$-- R = R_0 \cdot \left[1 + \alpha_{\rho} (T - T_0)\right] --.$$

Column 8, line 17: " α_p " should be -- α_p --.

Column 9, line 8:

"
$$T_c = T_a + \eta W = T_a + \eta \cdot I$$
 $c^2 R_c = T_a + \eta \cdot I$ $c^2 R_0 \cdot \left[1 + \alpha_{p} (T_c - T_0)\right]$ "should

be --
$$T_c = T_a + \eta W = T_a + \eta \cdot I_c^2 R_c = T_a + \eta \cdot I_c^2 R_0 \cdot [1 + \alpha_\rho (T_c - T_0)]$$
 --.

Column 9, line 22: " $\varepsilon = \alpha_p \eta I^2 R_0$ " should be -- $\varepsilon = \alpha_p \eta I^2 R_0$ --.

Column 9, line 64: " $R \approx R_0 \cdot \{1 + \alpha_p [(T_a + \eta \cdot W) - T_0]\}$ " should be

$$-R \approx R_0 \cdot \left\{1 + \alpha_\rho \left[\left(T_a + \eta \cdot W\right) - T_0\right] \right\} - .$$

Column 10, lines 11-12:

"
$$R_s = R_0 \cdot \left\{ 1 + \alpha_p \left[(T_{a,s} + \eta_s \cdot W_s) - T_0 \right] \right\} \approx R_0 \cdot \left\{ 1 + \alpha_p \left[(T_a + \eta \cdot W_s) - T_o \right] \right\}$$
"

should be

$$= R_0 \cdot \left\{ 1 + \alpha_{\rho} \left[(T_{a,s} + \eta_s \cdot W_s) - T_0 \right] \right\} \approx R_0 \cdot \left\{ 1 + \alpha_{\rho} \left[(T_a + \eta \cdot W_s) - T_0 \right] \right\} = 0$$

Column 10, line 32: " α_p " should be -- α_p --

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Column 11, line 23: " $R_s \approx R_0 \cdot \{1 + \alpha_p [(T_a + \eta \cdot W_s) - T_0]\} = R_a + \alpha_p \eta \cdot R_0 \cdot W_s$ "

should be

$$-R_s \approx R_0 \cdot \{1 + \alpha_\rho [(T_a + \eta \cdot W_s) - T_0]\} = R_a + \alpha_\rho \eta \cdot R_0 \cdot W_s - -$$

Column 12, line 51: "can be ed as" should be -- can be determined as --.

Column 13, line 26: " $I^{I}(R_{s}-R) \ll \Delta W$ " should be -- $I^{2}(R_{s}-R) \ll \Delta W$ --.

Column 18, lines 3-4 (claim 14): " $\Delta W = 2 \cdot \frac{m}{\alpha_{\rho} \times t \times R_{0}} \cdot [R, -R]$ " should be

$$-\Delta W = \frac{m}{\alpha_{\rho} \times t \times R_{0}} \cdot [R_{s} + R(0) - 2R] -..$$

Column 18, line 65 (claim 18): " α_p " should be -- α_p --.

Column 19, line 55 (claim 20): " α_p " should be -- α_p --.

Column 20, line 22 (claim 21): " α_p " should be -- α_ρ --.

Column 20, line 65 (claim 22): " α_p " should be -- α_{ρ} --.

Signed and Sealed this

Fifteenth Day of January, 2008

JON W. DUDAS
Director of the United States Patent and Trademark Office